



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/117,799	08/06/1998	WOLFGANG FRAAS	P98.1428	4083

21171 7590 10/20/2004

STAAS & HALSEY LLP  
SUITE 700  
1201 NEW YORK AVENUE, N.W.  
WASHINGTON, DC 20005

EXAMINER

TSEGAYE, SABA

ART UNIT

PAPER NUMBER

2662

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/117,799

Applicant(s)

FRAAS ET AL.

Examiner

Saba Tsegaye

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. Claims 1-8 are pending. Claims 1-8 remain rejected under 35 U.S.C. 103(a).

***Claim Rejections - 35 USC § 103***

2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duault et al. (US 5,638,365) in view of McKinney et al. (ATM for Narrowband Services 1994 IEEE).

Regarding claims 1, 3, 4 and 6, Duault discloses, in Fig. 5, a transmission system for transmitting digital signals between TDM-based terminal equipment (DTE) (as in claim 6) comprising:

an ATM network (13) having user interfaces (column 5, lines 52-55) (as in claims 1, 3 and 6);

connection units (15) provided respectively at the exchange termination to respectively connect the exchange termination to one of the user interfaces of the ATM network (as in claims 1, 4 and 6); and

conversion units (IWF) to convert time-division multiples data into ATM cells, or ATM cells into time-division multiples data (column 5, lines 50-55) (as in claims 1 and 4).

Further, Duault describes that interconnection of PBXS presents requirements to multiplex several TDM channel in an ATM connection. It has the advantage to decrease the cell payload assembly delay.

However, Duault does not expressly disclose: an LT, which is the ET and the LT respectively connected to ATM network (as in claim 1); and an allocation unit to allocate a virtual ATM channel to each TDM channel (as in claims 1 and 4).

McKinney discloses, in Fig. 3, a transmission system for transmitting digital signals between premises based ISDN controller (LT) and Terminal Equipments (ET) (claimed the ET and the LT respectively connected to ATM network). As known in the art, LT is electronics **at the ISDN network** side of the user-network interface that complements the electronics equipment. McKinney shows conversion units (NA) terminates the ISDN interface and provides the interworking functions (see page 65, ATM Deployment Strategies; page 68, ISDN switched digital Services).

It would have been obvious to one ordinary skill in the art at the time the invention was made to substitute a line termination, such as that suggested by McKinney, to the DTE of Duault. One would have been motivated to do this because it is an efficient way of enabling a narrow-band communication between subscriber terminals.

Further, McKinney teaches an allocation unit to allocate each user's digital channel to an ATM virtual channel. The network adaptor NA terminates the ISDN interface and provides interworking functions (page 68, "Adaptation Requirements" lines 7-9).

It would have been obvious to one ordinary skill in the art at the time the invention was made to substitute an allocation unit that allocate a virtual ATM channel to each TDM channel, such as that suggested by McKinney, to the allocation unit, in the circuit emulation service of

Art Unit: 2662

Duault. One would have been motivated to do this because it would distribute signals of each TDM channels to respectively ATM cells.

Regarding claim 2, Duault discloses a transmission system further comprising a switching device for switching time division multiplex digital signal between a plurality of exchange terminations wherein the plurality of exchange terminations of the switching device are connected to a single user interface of an ATM network (column 5, lines 50-55).

Regarding claims 5, 7 and 8, Duault in view of McKinney discloses all the claim limitations as stated above. Duault in view of McKinney does not expressly disclose that the conversion units serving the function of V<sub>1</sub> reference point. V<sub>1</sub> reference point is an interface point in an ISDN environment between the line termination and the exchange termination according to ITU-T G.960. McKinney shows, in Fig. 3, the NA terminates the ISDN interface and provides the interworking functions. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the conversion units serving the function of V<sub>1</sub> reference point to the conversion units of Duault in view of McKinney in order to comply the standard since the V<sub>1</sub> is the reference point between the exchange termination and the line termination so would be logical to comply the ATM network with V<sub>1</sub> reference. One would have been motivated to do this because V<sub>1</sub> reference point increases the interface speed that reduces delay at the conversion units.

Further, Duault in view of McKinney does not expressly disclose allowing the subscriber terminal to be moved from one location to another (**as in claim 8**). A portable terminal is well

Art Unit: 2662

known in the art and it would have been obvious to one of ordinary skill in the art to use a portable terminal that can be used in different locations.

***Response to Arguments***

3. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.


***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saba Tsegaye whose telephone number is (571) 272-3091. The examiner can normally be reached on Monday-Friday (7:30-5:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ST  
October 12, 2004

  
**JOHN PEZZLO**  
**PRIMARY EXAMINER**